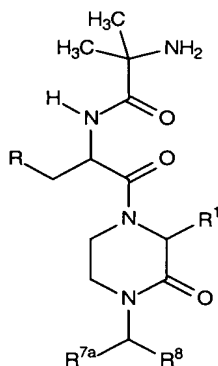


ABSTRACT OF THE DISCLOSURE

## MELANOCORTIN RECEPTOR LIGANDS

The present invention relates to compounds which comprise a nitrogen-containing ring scaffold substituted by an R<sup>1</sup> alkyl units selected from the group consisting of C<sub>1</sub>-C<sub>12</sub> linear or branched alkyl, C<sub>3</sub>-C<sub>8</sub> cyclic alkyl, C<sub>2</sub>-C<sub>12</sub> linear or branched alkenyl, or haloalkyl, for example, the 2-keto-3-alkylpiperazines having the formula:



wherein R is selected from the group consisting of phenyl, 3-fluorophenyl, 4-fluorophenyl, 3,5-difluorophenyl, and 4-chlorophenyl; R<sup>1</sup> is selected from the group consisting of methyl, ethyl, propyl, *iso*-propyl, butyl, *iso*-butyl, *sec*-butyl, *tert*-butyl, cyclopropyl, cyclopropylmethyl, cyclopentyl, cyclopentylmethyl, cyclohexyl, cyclohexylmethyl, benzyl, allyl, 1-methylallyl, 2-methylallyl, but-2-enyl, and propargyl; R<sup>7a</sup> is selected from the group consisting of hydrogen, -CO<sub>2</sub>H, -CONH<sub>2</sub>, -CONHCH<sub>3</sub>, and -CON(CH<sub>3</sub>)<sub>2</sub>; R<sup>8</sup> is benzyl, substituted benzyl, or naphthalen-2-ylmethyl..